AMERICAN INSTITUTE *for* ECONOMIC RESEARCH

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MONTHLY BULLETIN

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RESEARCH REPORTS

COMING EFFECTS OF CURRENT EVENTS

A Measure of Defense Effort

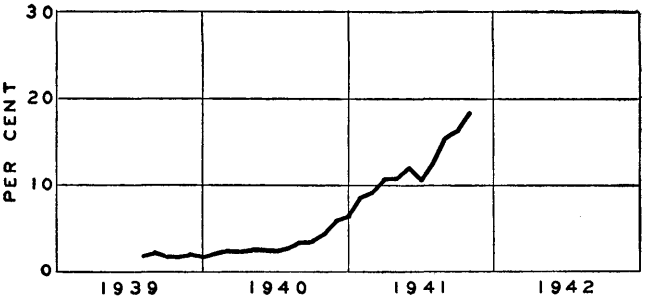
The decisive part that production back of the fighting lines will play in the war's outcome is universally realized and has been generally acknowledged. By this token, there should be no question of a successful outcome for the Allies, once the great industrial resources of the United States are mobilized for the prosecution of war. The extent to which we shall be called on to devote our productive effort to the war will depend on its duration and the extent of the operations necessary to defeat the enemy.

Published statements indicate that from fifty to sixty per cent of British production is devoted to defense. It has been estimated that as high as eighty per cent of German production is destined for war use. The director of the Office of Production Management has indicated in speeches that estimates of the extent of our war efforts, expressed as a per cent of total production, are being made regularly. Because production for national defense is not shown separately from production for private use in data published by the United States Department of Commerce, it is impossible to base estimates on figures from this source. Probably the best measure of our war effort, in terms of the proportion of our production devoted to defense, can be obtained from statistics expressed in dollars. The great diversity in the units of materials produced makes it impossible to derive a common denominator expressed in physical terms.

As a rough measure of our defense effort, we have therefore computed expenditures for national defense as a per cent of the Nation's total income payments (which includes payments for defense in their totals) in a monthly statistical series. The data are plotted in the accompanying chart, beginning in July 1939, just before the start of the war in Europe, through October 1941, the latest period for which data are available.

The chart shows that before the war started in Europe, the per cent of the Nation's total income payments that were devoted to national defense was slightly less than two per cent. This increased to about 2½ per cent during the first six months of 1940, but, after the fall of France impelled us to start an extensive rearmament program, the proportion of our production for national defense began to increase, and by the end of 1940 was about six per cent of the aggregate. The rate of increase was accelerated throughout most of

PER CENT OF TOTAL INCOME FOR NATIONAL DEFENSE



1941 and in October had reached 18½ per cent. If the recent rate of increase continues, the goal of more than fifty per cent by the end of 1942, estimated by Government officials as the minimum requirement, probably will be achieved.

THE FUNDAMENTALS

Industrial Production

Industrial activity continued to increase during the latter part of November, and the Institute's index for that month was revised from 147.3 to 152.2. The Institute's preliminary index for December is 153.0. During the past few months the revised indexes have usually been higher than the preliminary indexes. Although data for some of the Nation's leading industries are available promptly, data for the transportation, including the shipbuilding, industries and for most mining activities are reported later. It is therefore necessary to make more extensive revisions when the industries from which reports are delayed increase their activity to an abnormal extent. Inasmuch as the aircraft and shipbuilding industries have been stirred by the national defense effort to great activity, the data representing production by these industries now comprise an abnormally large proportion of the Nation's total output.

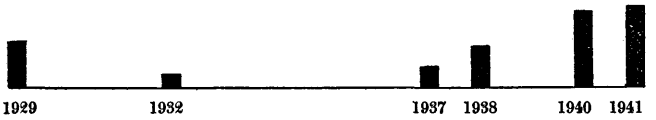
Until our actual participation in the war, most of the leading industries participated in varying degrees in the national defense boom. A few, notably the silk industry, suffered severely from the war. Others, such as the automobile passenger-car, the plate-glass, the lumber, the newsprint, and some food industries, have

Notice to Annual Sustaining Members: A copy of the *Rubber Budget Account Book* for 1942 has been mailed to you. If you do not receive it this week, please let us know.

failed to increase production materially or have actually decreased their activities during the past year.

The daily average steel-ingot production rate remained at about the same level during December as prevailed in November, when output was nearly 7,000,000 short tons. The bar charts show that steel-ingot production during December 1940 and 1941 exceeded that in preceding Decembers by a considerable margin. The small gain in output in December 1941, compared with production in the corresponding month of 1940, was attributable to the expansion in producing facilities during the year. The industry operated at about the same per cent of theoretical capacity during the last two periods shown on the bar charts.

IRON AND STEEL PRODUCTION



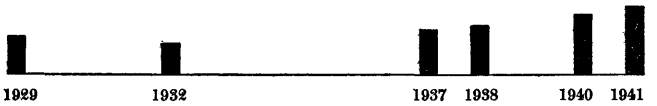
Last week the steel-ingot production rate decreased from 97½ to 93½ per cent of theoretical capacity. Last year the drop in the holiday week was from 97 to 81 per cent. *The Iron Age* stated: "Emphasizing the speed with which industry is being converted to a wartime basis, steel manufacturers estimate that within the next sixty days, as much as ninety per cent of production at some large plants will be earmarked for war use. Projected shipping schedules for December indicated that 68 to 70 per cent would go for war needs, figures which are being changed by Pearl Harbor."

	1929	*1932*	*1937*	*1938*	*1940*	*1941*
Per Cent of Capacity	63.0	12.5	22.5	40.0	81.0	93.5

(Latest 1941 weekly data; corresponding week earlier years)

The seasonal peak of production in the electric-power industry is in December, and this year total kilowatt-hours generated established a new high record. With the exception of a limited region in the South that was affected by a shortage in water power, the electric-power industry has experienced no difficulty in meeting the heavier demand caused by the defense effort. In most areas, the industry still has some unused capacity, and no general power shortage appears to be in early prospect.

ELECTRIC-POWER OUTPUT



Electric-power production increased from 3,431,328,000 to 3,448,597,000 kilowatt hours last week. Output was 13 per cent greater than it was in the corresponding week of 1940.

	1929	*1932*	*1937*	*1938*	*1940*	*1941*
Billion Kilowatt Hours	1.64	1.42	2.09	2.36	3.05	3.45

The bar charts representing automobile production afford a contrast to those showing the activity of other leading industries in December 1941. Before our entrance into the war, curtailment of passenger-car production had started and more drastic cuts were immediately made. Only sustained truck production prevented the industry from making an even poorer record in December.

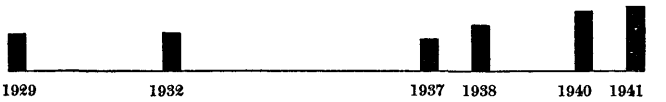
AUTOMOBILE PRODUCTION

During the latest week reported, the automobile industry produced 65,875 units compared with 95,990 in the preceding week and 130,370 during the corresponding week of 1940.

	1929	*1932*	*1937*	*1938*	*1940*	*1941*
Units (000 omitted)	24	27	67	103	130	66

The cotton-goods industry during December maintained operations close to practical capacity. The industry in 1941 exceeded the impressive record made in 1940.

COTTON-MILL PRODUCTION

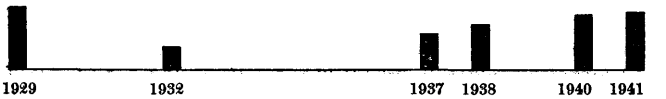


Cotton-mill activity increased last week, and the adjusted index advanced from 159.6 to 164.7 per cent of estimated normal.

	1929	*1932*	*1937*	*1938*	*1940*	*1941*
New York Times Index	108.8	98.5	92.1	126.6	150.2	164.7

There was only a small gain in lumber production during December, and the level of operations as shown by the bar charts was approximately the same as it was a year ago.

LUMBER PRODUCTION



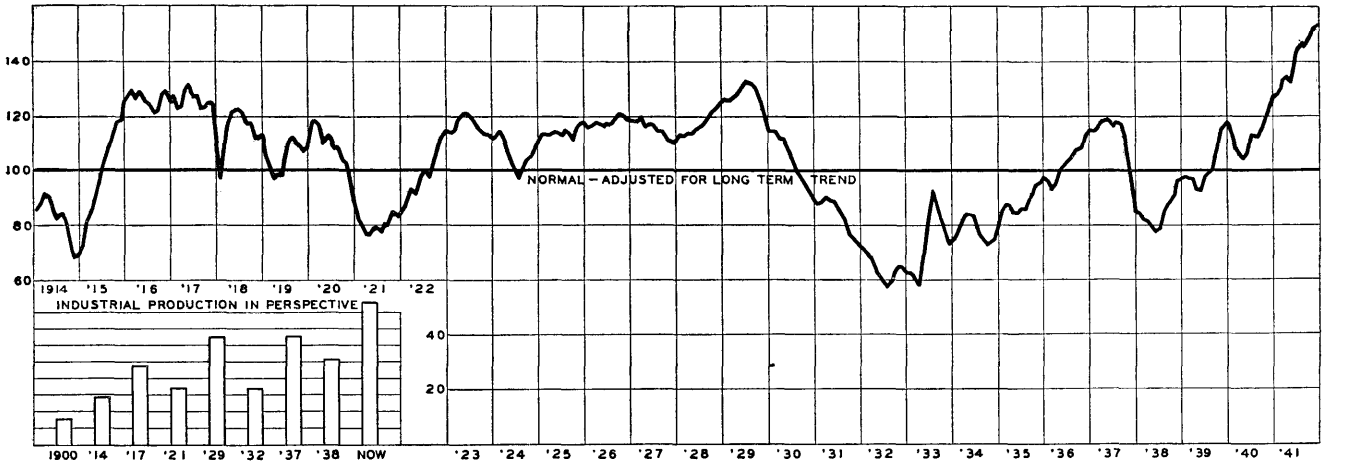
The Harwood Index of Inflation

The preliminary Index of Inflation in ratio form for December, at 106.0, was fractionally lower than the November Index (revised from 105.5 to 106.4). The chart on page 211 shows the Index of Inflation in ratio form, which is the ratio of all purchasing media available for use to the portion that is not inflationary. The dotted line on this chart shows the actual totals of inflationary purchasing media. (The scale for the ratio form is at the left side of the chart. The scale in billions of dollars for the total of purchasing media is at the right.)

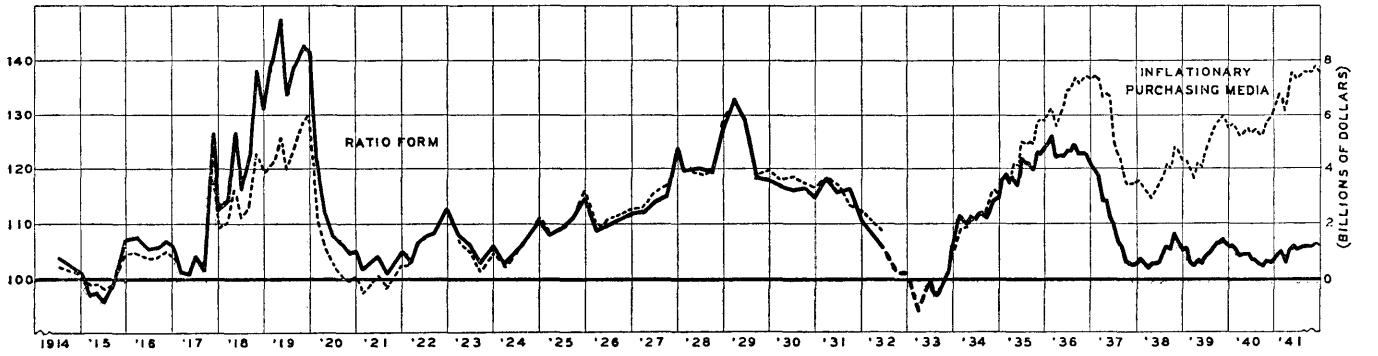
The preliminary Index for December was based on the latest available reports of the commercial banks as of December 17. Since the end of November, there were several important changes in the items involved. There was an increase of $500,000,000 in the banks' investment-type assets. The increase was caused almost entirely by the banks' subscribing to the Treasury's $1,500,000,000 national defense bond issue, the settlement date for which was December 15. There was no appreciable change in the savings-type liabilities of the banking system. Ordinarily, these circumstances would cause a substantial advance in the Index. However, at the same time that inflationary purchasing media were being created by the banks, other purchasing media were being withdrawn from private accounts by the Treasury.

The Treasury was able to build up its balances with the Federal Reserve Banks and with other depositaries

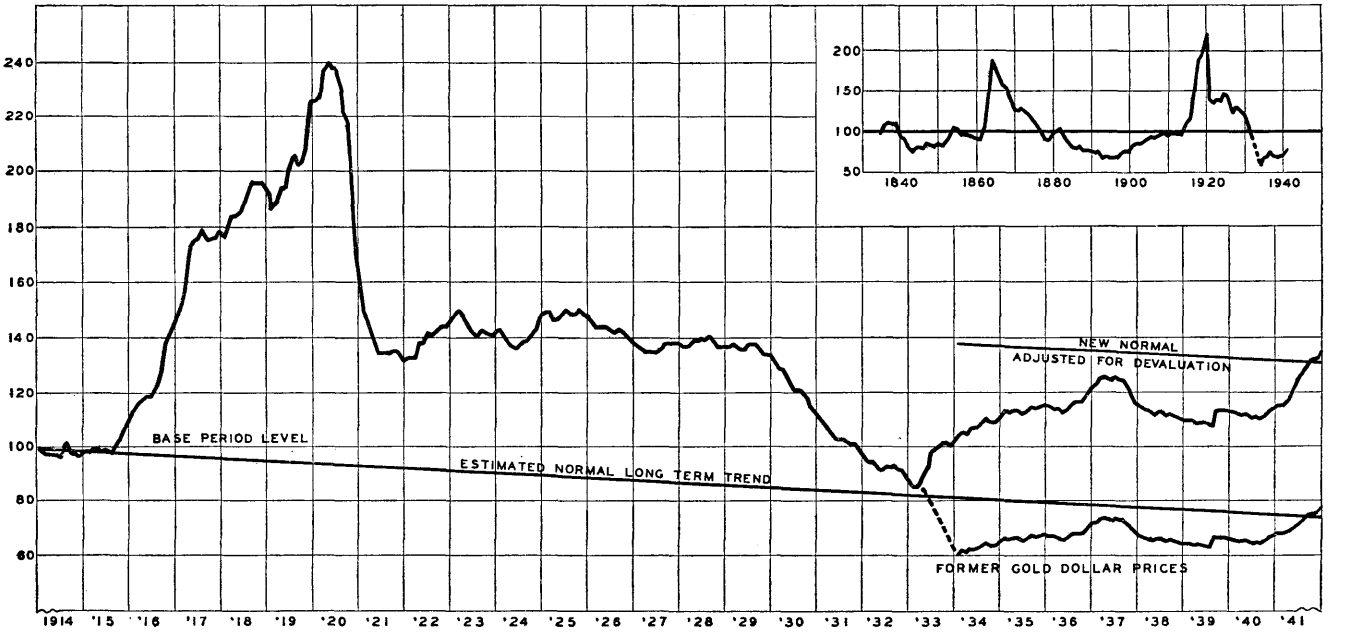
INDUSTRIAL PRODUCTION



HARWOOD INDEX OF INFLATION



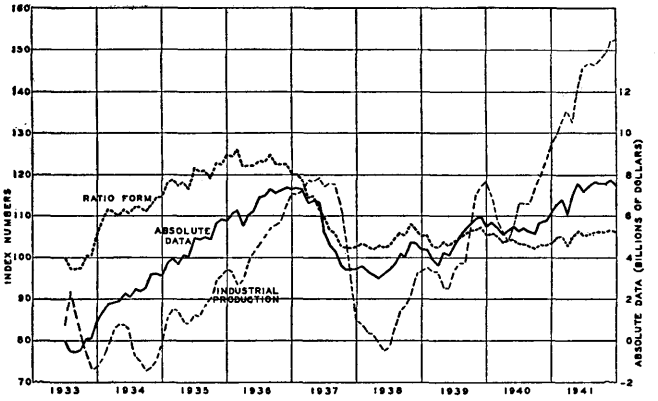
COMMODITY PRICES



by sales of its new bond issue and by receipts from the fourth installment of the income tax. These two factors caused an increase in the Government's bank balances during the middle of the month from $1,500,000,000 to $3,000,000,000. Thus, $1,500,000,000 was temporarily withdrawn from the total purchasing media available to the public.

The accompanying chart of the Harwood Index of Inflation in ratio form, the absolute data for the Index of Inflation, and the Institute's industrial production index are presented regularly in the monthly bulletin.

HARWOOD INDEX OF INFLATION, RATIO FORM, ABSOLUTE DATA, AND INDUSTRIAL PRODUCTION



Both the Index in ratio form and the absolute data (total inflationary purchasing media) remained about unchanged during the second half of 1941. In this period, the defense effort was being financed partly from taxation and partly by the Nation's savings. During the past six months industrial activity has continued to increase but at a less rapid rate than prevailed during the preceding twelve months.

Other Demand Factors

Preliminary reports indicate that business during the extra shopping days before Christmas this year (December this year has an extra selling day because there were only four Sundays in the month, compared with five in December 1940) brought the dollar total for the season to a level about five per cent above last year's sales, but it will be another week before final data are available. Prices of retail merchandise this year were nearly 13 per cent higher than the prices of holiday offerings a year ago. Inasmuch as a comparable increase in the dollar volume of retail sales for December is not now indicated, it is apparent that the physical volume of consumer goods being distributed is less this year.

COMMODITY PRICES

Although our entry into the war was followed by an appreciable acceleration in the upward movement of commodity prices, the advance was more restrained than that in September 1939 at the outbreak of war in Europe. The United States Bureau of Labor Statistics' combined index of commodity prices rose from 131.5 in November to 133.4 (preliminary) in December. There were advances in all three of the economic classes; raw materials, semi-manufactures, and finished goods.

Among the component commodity groups, there was only one, fuel and lighting materials, that failed to advance in December. During the past year, the most substantial gains have been made by farm products (33 per cent), food (23 per cent), and textile products (21 per cent). Relatively small gains were made in the prices of metals and metal products (6 per cent), fuel and lighting materials (10 per cent), and miscellaneous commodities (13 per cent). The accompanying table shows the changes that have occurred in the major classifications of the wholesale commodity price index. The December 1941 preliminary indexes are compared with the revised indexes of earlier significant periods.

UNITED STATES BUREAU OF LABOR STATISTICS
WHOLESALE COMMODITY PRICE INDEX

(Monthly Average 1913=100)

	Dec. 1929	*Dec. 1932*	*Dec. 1940*	*Nov. 1941*	*Dec.* 1941*
Farm Products	142.5	61.7	97.5	125.9	129.8
Foods	153.7	90.8	114.5	138.2	140.8
Hides and Leather	157.6	102.2	150.2	168.3	169.5
Textile Products	153.2	92.5	130.5	157.8	158.8
Fuel and Light	135.6	113.1	117.0	130.3	128.9
Metals and Products	108.5	87.4	107.5	112.6	113.9
Building Materials	166.5	124.7	175.1	188.5	190.1
Chemicals	†	†	96.9	112.0	114.1
House Furnishings	168.2	130.7	157.9	177.6	181.7
Miscellaneous	117.8	90.8	110.7	122.8	125.4
Raw Materials	138.1	75.7	107.0	130.2	132.8
Semimanufactures	122.8	77.0	107.7	119.8	120.3
Finished Goods	133.6	98.6	119.3	134.6	136.3
All Commodities	133.7	89.7	114.6	131.5	133.4

* Preliminary Estimate. † In process of revision.

Last week the sensitive wholesale commodity price indexes remained substantially unchanged. Moody's Spot Commodity Price Index was 216.6 on December 18 and 218.0 on December 24. The Dow-Jones Index of Commodity Futures closed at 83.88 on December 18 and at 83.91 on December 24. At the highest level reached last week, the spot commodity price index was 56 per cent higher than it was at the end of August 1939, just before the war began. The futures index has advanced even more than has the spot commodity price index, and last week it was 81 per cent higher than it was at the end of August 1939. During this period, the United States Bureau of Labor Statistics' combined wholesale commodity price index, which includes more than 800 separate quotations, has advanced 24 per cent.

Statistical Summary; Production, Purchasing Media, and Prices

	1940	1941											
	Dec.	*Jan.*	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.**
Index of Industrial Production	128.7	129.4	133.0	135.5	132.6	141.5	146.0	146.8	146.5	147.3	148.9	152.2	153.0
Index of Inflation (ratio form)	103.6	105.1	105.2	102.8	105.2	106.6	105.3	105.7	106.1	106.2	106.1	106.4	106.0
Commodity Price Index	114.6	115.8	115.5	116.8	119.2	121.6	124.8	127.2	129.4	130.9	131.4	131.5	133.4
Commodity Price Index (In terms of former gold dollar)	67.8	68.5	68.3	69.1	70.5	72.0	73.8	75.3	76.6	77.4	77.8	77.8	78.9

* Preliminary Estimate.